

# **Commonwealth Edison Company's Multi-Year Performance Metrics Annual Report for the Year Ending December 31, 2019**

**April 16, 2020**

**Revised**



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An Exelon Company

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Multi-Year Performance Metrics Annual Report  
for the Year Ending December 31, 2019**

Pursuant to the requirements of Section 16-108.5(f-5) of the Public Utilities Act (“Act”), Commonwealth Edison Company (“ComEd”) submits to the Illinois Commerce Commission (“Commission”) for informational purposes this Multi-Year Performance Metrics Annual Report for the Year Ending December 31, 2019 (“Annual Report”). As explained more fully below, Section 16-108.5(f) of the Act creates two separate 10-year tracks and accordingly this Annual Report describes ComEd’s achievement of the annual performance goals associated with (i) the reliability-related metrics and the metric related to opportunities for minority-owned and women-owned business enterprises (“MWBE”) during the period January 1, 2019 through December 31, 2019 (“Performance Year 7”) and (ii) the metrics that utilize the technology or functionality under ComEd’s Advanced Metering Infrastructure Deployment Plan (“AMI Plan”) approved by the Commission in Docket Nos. 12-0298 and 13-0285 and later accelerated in Docket No. 14-0212, hereafter referred to as the (“Accelerated AMI Plan”), during the period August 1, 2018 through July 31, 2019 (“AMI Performance Year 6”).

ComEd’s overall reliability has improved as a result of the investments made from the Energy Infrastructure Modernization Act (“EIMA”). As described more fully in Section III, *infra*, ComEd achieved all of its annual performance goals for the year ending December 31, 2019. Section IV, *infra*, describes ComEd’s achievement toward the annual performance goals for AMI Performance Year 6 where ComEd achieved the annual performance goal for total number of estimated bills and an aggregate average of 193% for its Consumption on Inactive Meters, Uncollectible Expense and Unaccounted for Energy.

## **I. BACKGROUND**

On November 8, 2011, ComEd filed its proposed performance-based formula rate, Rate DSPP – Delivery Service Pricing and Performance (“Rate DSPP”), with the Commission in ICC Docket No. 11-0721 pursuant to Section 16-108.5 of the Act. In making that filing, ComEd elected to become a “participating utility”, and committed to undertake the investments described in Section 16-108.5 of the Act.

To address the performance component of Rate DSPP, the Act requires that a participating utility improve its performance in a variety of categories and submit a plan and tariff to this end. On December 8, 2011, ComEd submitted to the Commission its (i) Multi-Year Performance Metrics Plan (“Plan”), which sets forth the 10-year performance metrics (“metrics”) that demonstrate how ComEd will achieve improvement over baseline values in various categories during this period, and (ii) Rider DSPM – Delivery Service Performance Metrics (“Rider DSPM”), which is the tariff mechanism that applies any financial penalties assessed by the Commission for a failure to meet annual performance goals. On April 4, 2012, the Commission entered an order approving, with modification, the Plan and Rider DSPM, and on April 9, 2012, ComEd filed its Multi-Year Performance Metrics Compliance Filing, which included the final Plan and Rider DSPM. *See generally*, ICC Docket No. 11-0772.

## **II. METRICS AND REPORTING**

The first section of ComEd’s Plan presents ComEd’s multi-year performance metrics, which are designed to achieve improvement over baseline values ratably (*i.e.*, in equal segments) over a 10-year period. Importantly, because performance is reviewed, and any penalties assessed, on an annual basis, the metrics identify annual performance goals that are “designed to demonstrate that the utility is on track to achieve the performance goal in each category at the end of the 10-

year period.” 220 ILCS 5/16-108.5(f).<sup>1</sup> Section 16-108.5(f) of the Act identifies each of the metrics applicable to ComEd, as well as each of the associated overall improvement goals and baseline calculations.

Importantly, the annual Performance Year period is not the same for all of the metrics set forth in ComEd’s Plan. As summarized below, Section 16-108.5(f) creates two separate 10-year tracks, each of which begins and ends on different dates:

- Reliability and MWBE Metrics: With respect to those metrics related to reliability and opportunities for minority-owned and women-owned business enterprises (Section 16-108.5(f)(1) through (4) and (9)), ComEd must elect a start date that is no later than 14 months following the date on which it begins investing in its infrastructure investment program. Accordingly, ComEd elected a start date of January 1, 2013 for these metrics based on the fact that ComEd began investing in its infrastructure investment program on January 1, 2012.
- AMI-Related Metrics: Concerning those metrics that utilize the technology or functionality under ComEd’s Accelerated AMI Plan (Section 16-108.5(f)(5) through (8)), ComEd must elect a start date that is no later than 14 months following the Commission’s order approving the AMI Plan. As reflected in its July 20, 2012 letter to the Commission, ComEd elected to commence performance related to its AMI-related metrics beginning August 1, 2013.

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<sup>1</sup> In certain instances, the calculations of the annual performance goals are subject to rounding adjustments.

For each annual period, the determination of whether ComEd achieved an annual performance goal is based on ComEd's performance as of the end of the relevant 12-month period. ComEd is deemed to have achieved an annual goal if its performance during the relevant 12-month period is sufficient to have satisfied the specific annual goal for that annual period.

### **III. ACHIEVEMENT OF ANNUAL PERFORMANCE GOALS DURING THE YEAR ENDING DECEMBER 31, 2019**

#### **A. Reliability-Related Metrics**

The first set of metrics set forth in Section 16-108.5(f) relates to ComEd's provision of reliable electric service to its customers. Of these five metrics, the first four relate to the measurement of the System Average Interruption Frequency Index ("SAIFI") and the Customer Average Interruption Duration Index ("CAIDI") (*see* Section III.A.1, *infra*), and the fifth measures performance under Service Reliability Targets (*see* Section III.A.2, *infra*).

#### **1. SAIFI- and CAIDI-Related Metrics**

For purposes of designing and calculating ComEd's performance under the SAIFI- and CAIDI-related metrics, the definitions set forth in 83 Illinois Administrative Code ("83 Ill. Admin. Code") Part 411.20 as of May 1, 2011, apply. In addition, ComEd may exclude up to nine Extreme Weather Event Days from the calculations related to these metrics. An Extreme Weather Event Day is a 24-hour calendar day beginning at 12:00 a.m. and ending at 11:59 p.m. during which any weather event caused interruptions of electric delivery service for 10,000 or more of its customers for three or more hours. *See* Appendix 1. ComEd has excluded up to nine Extreme Weather Event Days from each year of the baseline calculations for the SAIFI- and CAIDI-related metrics. *See* Appendix 1. Moreover, when calculating ComEd's performance under each of the annual performance goals for these metrics, the same Extreme Weather Event Days shall be excluded

from each calculation. However, the calculations for Southern Region SAIFI and Northeastern Region SAIFI exclude only those customer interruptions occurring in each of these respective regions. The nine Extreme Weather Event Days excluded from the calculations of the performance of the SAIFI- and CAIDI-related metrics are provided in Appendix 2.

a. **System Average Interruption Frequency Index  
(Section 16-108.5(f)(1))**

**Definition.** The System Average Interruption Frequency Index (“SAIFI”) is defined by 83 Ill. Admin. Code 411.20 as “the average number of interruptions per customer during the year. It is calculated by dividing the total annual number of customer interruptions by the total number of customers served during the year.”

$$\text{SAIFI} = \frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers Served}}$$

**Performance Goal.** ComEd must improve system-wide SAIFI (“System SAIFI”) by 20%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is determined based on the average of the System SAIFI data reported to the Commission in ComEd’s annual reports to the Commission for the years 2001 through 2010.<sup>2</sup> After excluding up to nine Extreme Weather Event Days from each baseline year, the System SAIFI baseline value is 0.998. *See* Appendix 1.

**Annual Performance Goals.** The annual System SAIFI goals are set forth in Table 1 and are designed to improve System SAIFI by 20% ratably over the 10-year period beginning

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<sup>2</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

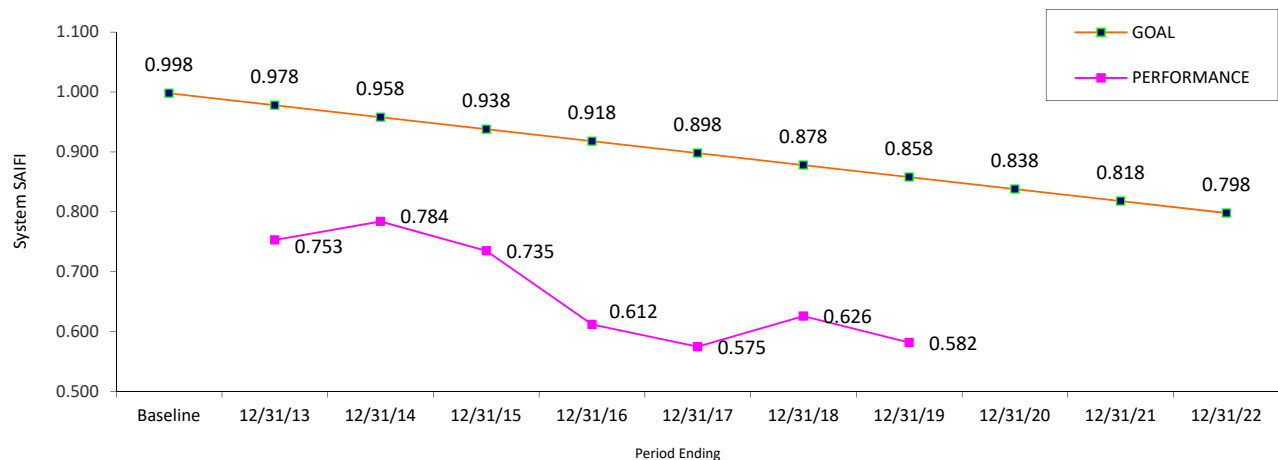
January 1, 2013 through annual reductions of 0.020. Chart 1 presents a graphical depiction of the System SAIFI annual goals over the 10-year period.

**Performance Year 7 Actual Performance.** For Performance Year 7, ComEd's annual performance goal for System SAIFI was 0.858. As reflected in Table 1 and Chart 1, ComEd's performance of 0.582 achieved the Performance Year 7 goal.

**TABLE 1: SYSTEM SAIFI ANNUAL GOALS & PERFORMANCE**

YEAR	SYSTEM SAIFI ANNUAL GOAL	SYSTEM SAIFI ANNUAL PERFORMANCE
	(average number of interruptions per customer)	
Baseline (2001-2010)	0.998	
1/1/13 – 12/31/13	0.978	0.753
1/1/14 – 12/31/14	0.958	0.784
1/1/15 – 12/31/15	0.938	0.735
1/1/16 – 12/31/16	0.918	0.612
1/1/17 – 12/31/17	0.898	0.575
1/1/18 – 12/31/18	0.878	0.626
1/1/19 – 12/31/19	0.858	0.582
1/1/20 – 12/31/20	0.838	
1/1/21 – 12/31/21	0.818	
1/1/22 – 12/31/22	0.798	

**CHART 1: SYSTEM SAIFI ANNUAL GOALS & PERFORMANCE**



**b. Customer Average Interruption Duration Index**  
**(Section 16-108.5(f)(2))**

**Definition.** The Customer Average Interruption Duration Index (“CAIDI”) is defined by 83 Ill. Admin. Code 411.20 as “the average interruption duration for those customers who experience interruptions during the year. It is calculated by dividing the annual sum of all customer interruption durations by the total number of customer interruptions.”

$$\text{CAIDI} = \frac{\text{Sum of all Customer Interruption Durations}}{\text{Total Number of Customer Interruptions}}$$

**Performance Goal.** ComEd must improve its system-wide CAIDI (“System CAIDI”) by 15%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is determined based on the average of the System CAIDI data reported to the Commission in ComEd’s annual reports to the Commission for the years 2001 through 2010.<sup>3</sup> After excluding up to nine Extreme Weather Event Days from each baseline year, the baseline value is 92.9 minutes. See Appendix 1.

**Annual Performance Goals.** The annual System CAIDI goals are set forth in Table 2 and are designed to improve System CAIDI by 15% ratably over the 10-year period beginning January 1, 2013 through annual reductions of 1.4 minutes. Chart 2 presents a graphical depiction of the System CAIDI annual goals over the 10-year period.

**Performance Year 7 Actual Performance.** For Performance Year 7, ComEd’s annual performance goal for System CAIDI was 83.1 minutes. As reflected in Table 2 and Chart 2,

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<sup>3</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

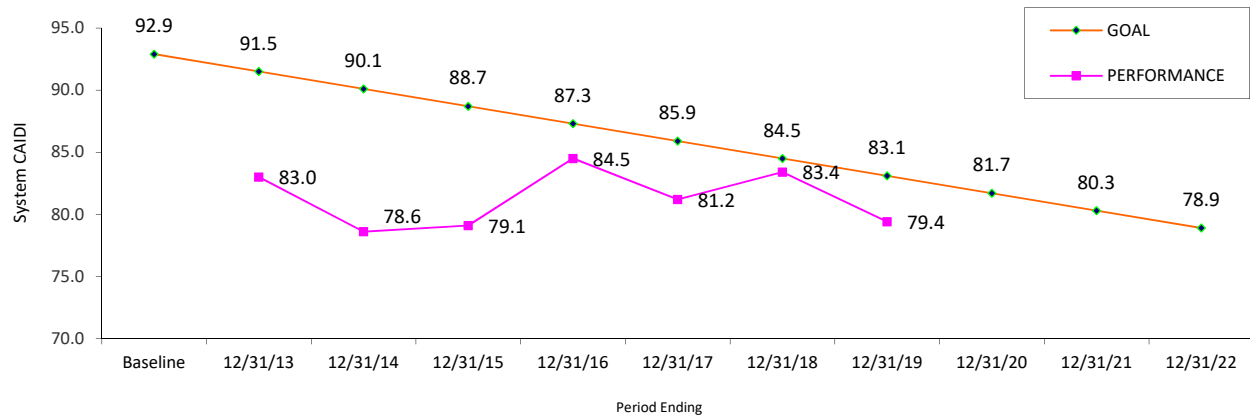


ComEd's performance of 79.4 minutes achieved the Performance Year 7 goal.

**TABLE 2: SYSTEM CAIDI ANNUAL GOALS & PERFORMANCE**

YEAR	SYSTEM CAIDI ANNUAL GOAL	SYSTEM CAIDI ANNUAL PERFORMANCE
	Average interruption duration for those customers who experience an interruption	
Baseline (2001-2010)	92.9	
1/1/13 – 12/31/13	91.5	83.0
1/1/14 – 12/31/14	90.1	78.6
1/1/15 – 12/31/15	88.7	79.1
1/1/16 – 12/31/16	87.3	84.5
1/1/17 – 12/31/17	85.9	81.2
1/1/18 – 12/31/18	84.5	83.4
1/1/19 – 12/31/19	83.1	79.4
1/1/20 – 12/31/20	81.7	
1/1/21 – 12/31/21	80.3	
1/1/22 – 12/31/22	78.9	

**CHART 2: SYSTEM CAIDI ANNUAL GOALS & PERFORMANCE**



c. **Southern Region SAIFI (Section 16-108.5(f)(3))**

**Definition.** The term “Southern Region” has the meaning set forth in ComEd’s 2010 annual report to the Commission submitted pursuant to Section 16-125 of the Act. Accordingly, the Southern Region SAIFI is calculated as follows:

$$\text{S. Region SAIFI} = \frac{\text{Total Number of Southern Region Customer Interruptions}}{\text{Total Number of Southern Region Customers Served}}$$

**Performance Goal.** ComEd must improve SAIFI for its Southern Region by 20%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is determined based on the average of the Southern Region SAIFI data reported to the Commission in ComEd’s annual reports to the Commission for the years 2001 through 2010.<sup>4</sup> After excluding up to 9 Extreme Weather Event Days from each baseline year, the baseline value is 1.236. *See* Appendix 1.

**Annual Performance Goals.** The annual Southern Region SAIFI goals are set forth in Table 3 and are designed to improve the Southern Region SAIFI by 20% ratably over the 10-year period beginning January 1, 2013 through achievement of annual reductions of 0.025. Chart 3 presents a graphical depiction of the Southern Region SAIFI annual goals over the 10-year period.

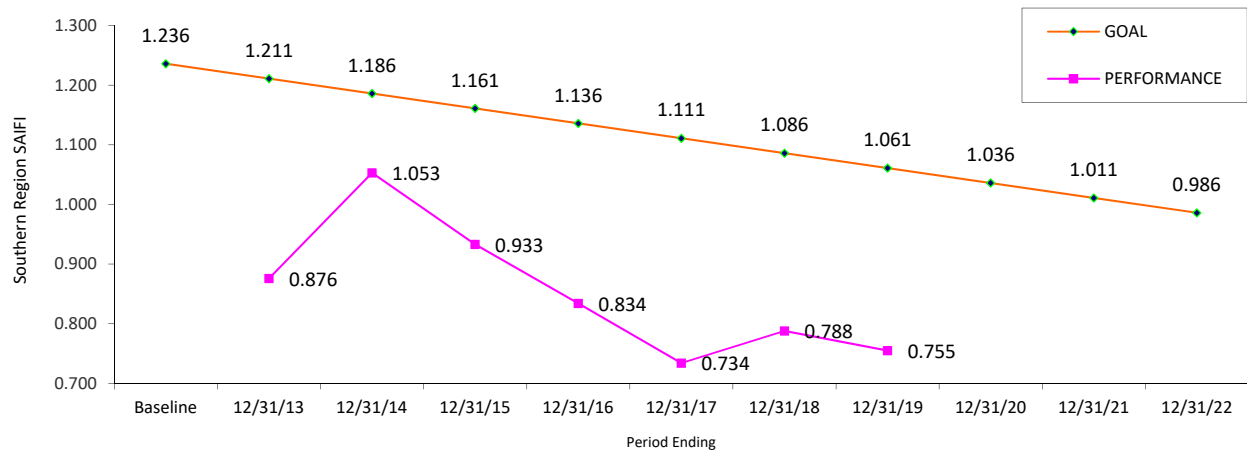
**Performance Year 7 Actual Performance.** For Performance Year 7, ComEd’s annual performance goal for Southern Region SAIFI was 1.061. As reflected in Table 3 and Chart 3, ComEd’s performance of 0.755 achieved the Performance Year 7 goal.

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<sup>4</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

**TABLE 3: SOUTHERN REGION SAIFI ANNUAL GOALS & PERFORMANCE**

YEAR	SOUTHERN REGION SAIFI ANNUAL GOAL	SOUTHERN REGION SAIFI ANNUAL PERFORMANCE
	(average number of interruptions per customer)	
Baseline (2001-2010)	1.236	
1/1/13 – 12/31/13	1.211	0.876
1/1/14 – 12/31/14	1.186	1.053
1/1/15 – 12/31/15	1.161	0.933
1/1/16 – 12/31/16	1.136	0.834
1/1/17 – 12/31/17	1.111	0.734
1/1/18 – 12/31/18	1.086	0.788
1/1/19 – 12/31/19	1.061	0.755
1/1/20 – 12/31/20	1.036	
1/1/21 – 12/31/21	1.011	
1/1/22 – 12/31/22	0.986	

**CHART 3: SOUTHERN REGION SAIFI ANNUAL GOALS & PERFORMANCE**

**d. Northeastern Region SAIFI (Section 16-108.5(f)(3.5))**

**Definition.** The term “Northeastern Region” has the meaning set forth in ComEd’s 2010 annual report to the Commission submitted pursuant to Section 16-125 of the Act. Accordingly, the Northeastern Region SAIFI is calculated as follows:

$$\text{NE. Region SAIFI} = \frac{\text{Total Number of Northeastern Region Customer Interruptions}}{\text{Total Number of Northeastern Region Customers Served}}$$

**Performance Goal.** ComEd must improve SAIFI for its Northeastern Region by 20%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is determined based on the average of the Northeastern Region SAIFI data reported to the Commission in ComEd’s annual reports to the Commission for the years 2001 through 2010.<sup>5</sup> After excluding up to 9 Extreme Weather Event Days from each baseline year, the baseline value is 1.006. *See* Appendix 1.

**Annual Performance Goals.** The annual Northeastern Region SAIFI goals are set forth in Table 4 and are designed to improve the Northeastern Region SAIFI by 20% ratably over the 10-year period beginning January 1, 2013 through annual reductions of 0.020. Chart 4 presents a graphical depiction of the Northeastern Region SAIFI annual goals over the 10-year period.

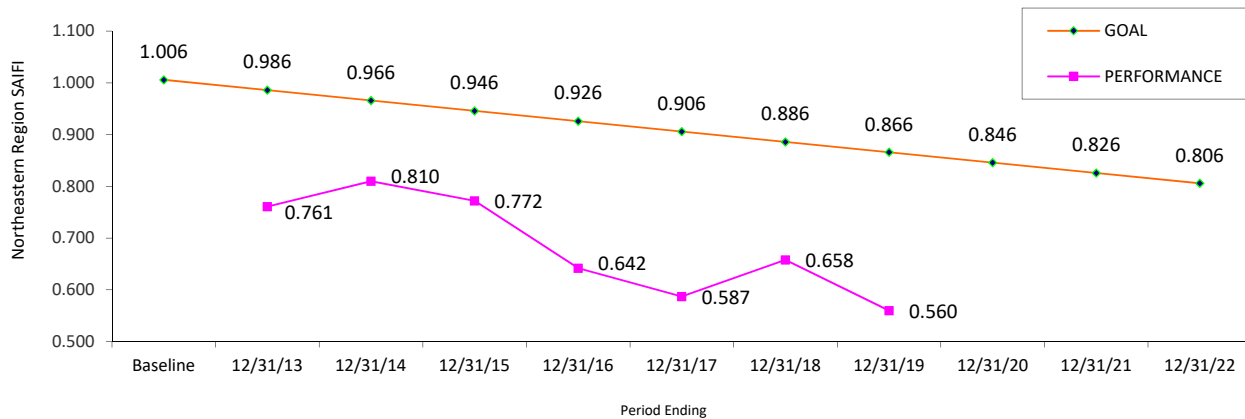
**Performance Year 7 Actual Performance.** For Performance Year 7, ComEd’s annual performance goal for Northeastern Region SAIFI was 0.866. As reflected in Table 4 and Chart 4, ComEd’s performance of 0.560 achieved the Performance Year 7 goal.

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<sup>5</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

**TABLE 4: NORTHEASTERN REGION SAIFI ANNUAL GOALS & PERFORMANCE**

YEAR	NORTHEASTERN REGION SAIFI ANNUAL GOAL	NORTHEASTERN REGION SAIFI ANNUAL PERFORMANCE
	(average number of interruptions per customer)	
Baseline (2001-2010)	1.006	
1/1/13 – 12/31/13	0.986	0.761
1/1/14 – 12/31/14	0.966	0.810
1/1/15 – 12/31/15	0.946	0.772
1/1/16 – 12/31/16	0.926	0.642
1/1/17 – 12/31/17	0.906	0.587
1/1/18 – 12/31/18	0.886	0.658
1/1/19 – 12/31/19	0.866	0.560
1/1/20 – 12/31/20		
1/1/21 – 12/31/21		
1/1/22 – 12/31/22		

**CHART 4: NORTHEASTERN REGION SAIFI ANNUAL GOALS & PERFORMANCE**

## **2. Service Reliability Targets Metric (Section 16-108.5(f)(4))**

**Definition.** Section 16-108.5(f)(4) of the Act defines the service reliability targets as those set forth in subparagraphs (A) through (C) of paragraph (4) of subsection (b) of 83 Ill. Admin. Code 411.140. These targets are as follows:

- A) Customers whose immediate primary source of service operates at 69,000 volts or above should not have experienced:
  - i) More than three controllable interruptions in each of the last three consecutive years.
  - ii) More than nine hours of total interruption duration due to controllable interruptions in each of the last three consecutive years.
- B) Customers whose immediate primary source of service operates at more than 15,000 volts, but less than 69,000 volts, should not have experienced:
  - i) More than four controllable interruptions in each of the last three consecutive years.
  - ii) More than twelve hours of total interruption duration due to controllable interruptions in each of the last three consecutive years.
- C) Customers whose immediate primary source of service operates at 15,000 volts or below should not have experienced:
  - i) More than six controllable interruptions in each of the last three consecutive years.
  - ii) More than eighteen hours of total interruption duration due to controllable interruptions in each of the last three consecutive years.

**Performance Goal.** ComEd must improve the total number of customers who exceed the service reliability targets by 75%, ratably over the 10-year period.

***Baseline Calculation.*** The baseline is the 2010 data reported to the Commission regarding performance under each of the service reliability targets.<sup>6</sup> The baseline value is 407 customers, which includes controllable and uncontrollable interruptions.

***Annual Performance Goals.*** The annual service reliability targets goals are set forth in Table 5 and are designed to improve the total number of customers who exceed the service reliability targets by 75% ratably over the 10-year period beginning January 1, 2013 through annual reductions of 31 customers. Chart 5 presents a graphical depiction of the service reliability targets annual goals over the 10-year period.

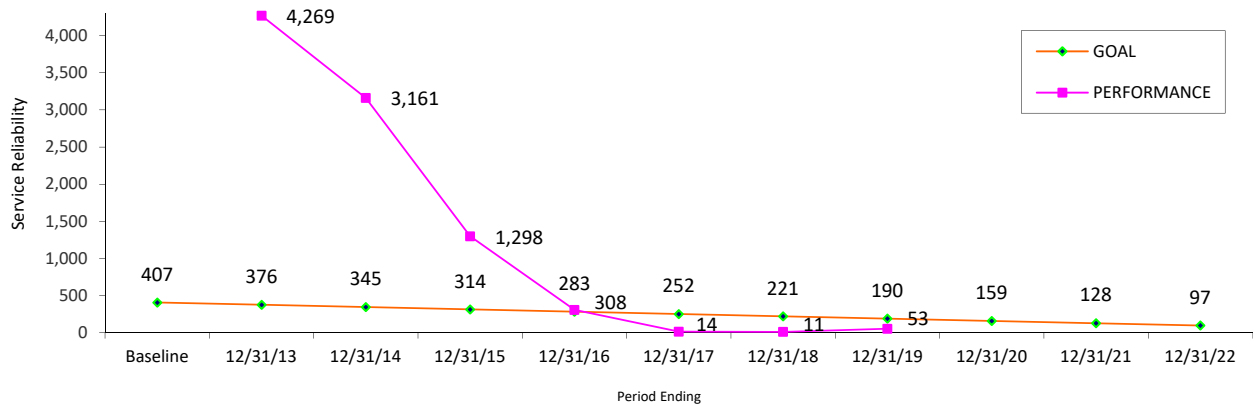
***Performance Year 7 Actual Performance.*** For Performance Year 7, ComEd's annual performance goal for service reliability targets was 190 customers. As reflected in Table 5 and Chart 5, ComEd's performance of 53 customers achieved the Performance Year 7 goal.

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<sup>6</sup> See <http://www.icc.illinois.gov/electricity/electricreliability.aspx>.

**TABLE 5: SERVICE RELIABILITY TARGETS ANNUAL GOALS & PERFORMANCE**

YEAR	SERVICE RELIABILITY TARGETS ANNUAL GOAL (customers)	SERVICE RELIABILITY TARGETS ANNUAL PERFORMANCE (customers)
Baseline (2010)	407	
1/1/13 – 12/31/13	376	4,269
1/1/14 – 12/31/14	345	3,161
1/1/15 – 12/31/15	314	1,298
1/1/16 – 12/31/16	283	308
1/1/17 – 12/31/17	252	14
1/1/18 – 12/31/18	221	11
1/1/19 – 12/31/19	190	53
1/1/20 – 12/31/20	159	
1/1/21 – 12/31/21	128	
1/1/22 – 12/31/22	97	

**CHART 5: SERVICE RELIABILITY TARGETS ANNUAL GOALS & PERFORMANCE**



## **B. MWBE Metric**

**Definition.** Section 16-108.5(f)(9) directs ComEd to design a performance metric regarding the creation of opportunities for minority-owned and women-owned business enterprises (“MWBE”) consistent with State and federal law. MWBE refers to a minority-owned or women-owned business that is a for-profit enterprise, regardless of size, physically located in the United States or its trust territories, which is owned, operated and controlled by minority group members or women. “Minority group members” refers to those individuals who are Asian, Black, Hispanic, or Native American.

Ownership by minority individuals or women means the business is at least 51% owned by such individuals or, in the case of a publicly-owned business, at least 51% of the stock is owned by one or more such individuals. Further, the management and daily operations are controlled by those minority group members or women.

**Performance Goal.** It is ComEd’s goal to increase its capital expenditures paid to MWBE by 15% over the 10-year period.

**Baseline Calculation.** The baseline is ComEd’s capital expenditures that were paid to MWBE in 2010. The baseline value is \$65,000,000.

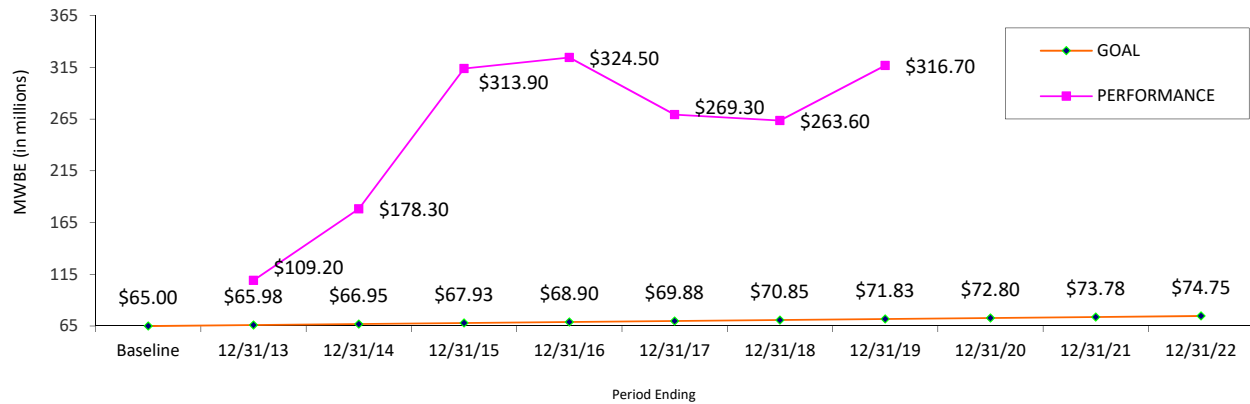
**Annual Performance Goals.** The MWBE annual goals set forth in Table 6 reflect annual capital expenditures to be paid to MWBE and are designed to increase such expenditures 15% ratably over the 10-year period beginning January 1, 2013 through annual increases in such expenditures of \$975,000. Chart 6 presents a graphical depiction of the MWBE annual goals over the 10-year period.

**Performance Year 7 Actual Performance.** For Performance Year 7, ComEd’s annual performance goal for capital expenditures paid to MWBE was \$71,825,000. As reflected in Table 6 and Chart 6, ComEd achieved the Performance Year 7 goal with actual capital expenditures of \$316,700,000.

**TABLE 6: MWBE ANNUAL GOALS & ACTUAL CAPITAL EXPENDITURES**

YEAR	CAPITAL EXPENDITURES PAID TO MWBE ANNUAL GOAL (\$)	CAPITAL EXPENDITURES PAID TO MWBE ANNUAL PERFORMANCE (\$)
Baseline ( 2010)	\$65,000,000	
1/1/13 – 12/31/13	\$65,975,000	\$109,200,000
1/1/14 – 12/31/14	\$66,950,000	\$178,300,000
1/1/15 – 12/31/15	\$67,925,000	\$313,900,000
1/1/16 – 12/31/16	\$68,900,000	\$324,500,000
1/1/17 – 12/31/17	\$69,875,000	\$269,300,000
1/1/18 – 12/31/18	\$70,850,000	\$263,600,000
1/1/19 – 12/31/19	\$71,825,000	\$316,700,000
1/1/20 – 12/31/20	\$72,800,000	
1/1/21 – 12/31/21	\$73,775,000	
1/1/22 – 12/31/22	\$74,750,000	

**CHART 6: MWBE ANNUAL GOALS & ACTUAL CAPITAL EXPENDITURES**



#### **IV. ACHIEVEMENT OF ANNUAL PERFORMANCE GOALS DURING THE YEAR ENDING July 31, 2019**

##### **A. AMI-Related Metrics**

The AMI-related metrics set forth in Section 16-108.5(f) are designed to measure ComEd's achievement of reductions in the issuance of estimated bills, consumption on inactive meters, non-technical line loss unaccounted for energy (*i.e.*, losses not related to distribution and transmission losses), and uncollectible expense. Because the various costs associated with these categories are recovered from customers, achievement of these metrics create customer benefits in the form of reduced costs of electric service.

##### **1. Estimated Electric Bills (Section 16-108.5(f)(5)).**

***Definition.*** ComEd renders an estimated monthly bill when a meter on an account was not read for the applicable monthly billing period. To reflect that the bill is estimated, the word "estimated" is plainly stated on the face of each such bill.

***Performance Goal.*** ComEd must reduce the number of estimated electric bills by 90%, ratably over the 10-year period.

***Baseline Calculation.*** The baseline is the average number of estimated bills for years 2008 through 2010. The baseline value is 7,067,947.

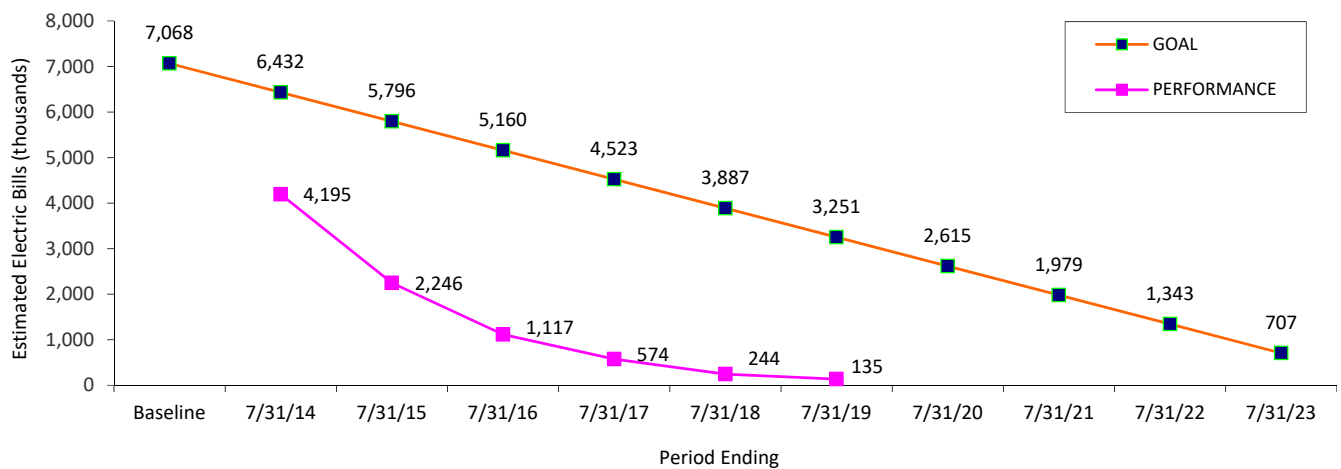
***Annual Performance Goals.*** The annual estimated electric bills goals are set forth in Table 7 and are designed to reduce the number of estimated electric bills by 90% ratably over the 10-year period beginning August 1, 2013. Chart 7 presents a graphical depiction of the annual estimated bills goals over the 10-year period.

**AMI Performance Year 6 Actual Performance.** For AMI Performance Year 6, ComEd’s annual performance goal for estimated electric bills was 3,251,251. As reflected in Table 7 and Chart 7, ComEd’s performance of 134,660 estimated bills achieved the AMI Performance Year 6 goal.

**TABLE 7: ESTIMATED ELECTRIC BILLS ANNUAL GOALS & PERFORMANCE**

YEAR	ESTIMATED BILLS ANNUAL GOAL (estimated bills)	ESTIMATED BILLS ANNUAL PERFORMANCE (estimated bills)
Baseline (2008-2010)	7,067,947	
8/1/2013 – 7/31/2014	6,431,831	4,194,878
8/1/2014 – 7/31/2015	5,795,715	2,246,167
8/1/2015 – 7/31/2016	5,159,599	1,116,675
8/1/2016 – 7/31/2017	4,523,483	573,558
8/1/2017 – 7/31/2018	3,887,367	243,612
8/1/2018 – 7/31/2019	3,251,251	134,660
8/1/2019 – 7/31/2020	2,615,135	
8/1/2020 – 7/31/2021	1,979,019	
8/1/2021 – 7/31/2022	1,342,903	
8/1/2022 – 7/31/2023	706,787	

**CHART 7: ESTIMATED ELECTRIC BILLS ANNUAL GOALS & PERFORMANCE**



## **2. Consumption on Inactive Meters (Section 16-108.5(f)(6)).**

**Definition.** Consumption on inactive meters (“CIM”) occurs when metered electricity has no customer on record to bill for usage. As a result, the costs for CIM are recovered from all ComEd customers receiving service under ComEd’s Rate BES – Basic Electric Service, rather than from the individual retail customer that is responsible for such usage. CIM generally occurs when the customer of record finalizes the account and there is no immediate successor customer that contacts ComEd to set up new service. ComEd tracks the total monthly kilowatthours (“kWh”) of electricity categorized as CIM by way of the regular monthly meter reads and retains such information even though a bill is not generated.

**Performance Goal.** ComEd must reduce CIM by 90%, ratably over the 10-year period.

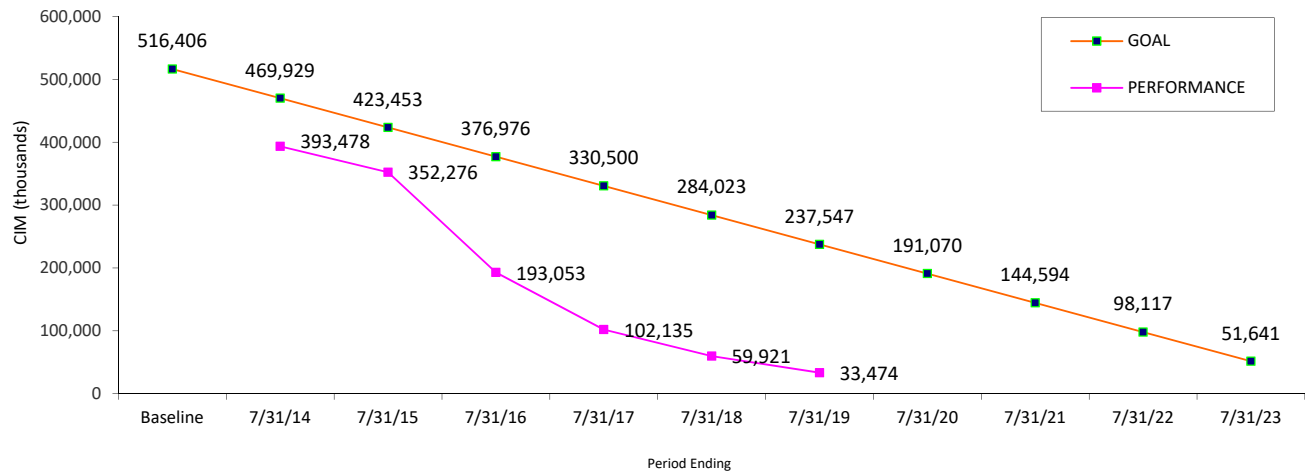
**Baseline Calculation.** The baseline is the average CIM for the years 2009 and 2010. The baseline value is 516,405,909 kWh.

**Annual Performance Goals.** The annual CIM goals are set forth in Table 8 and are designed to reduce CIM by 90% ratably over the 10-year period beginning August 1, 2013. Chart 8 presents a graphical depiction of the annual CIM goals over the 10-year period.

**AMI Performance Year 6 Actual Performance.** For AMI Performance Year 6, ComEd’s annual performance goal for CIM was 237,546,717 kWh. As reflected in Table 8 and Chart 8, ComEd’s performance of 33,473,728 kWh achieved the AMI Performance Year 6 goal.

**TABLE 8: CIM ANNUAL GOALS & PERFORMANCE**

YEAR	CIM ANNUAL GOAL (kWh)	CIM ANNUAL PERFORMANCE (kWh)
Baseline (2009-2010)	516,405,909	
8/1/2013 – 7/31/2014	469,929,377	393,478,189
8/1/2014 – 7/31/2015	423,452,845	352,275,519
8/1/2015 – 7/31/2016	376,976,313	193,052,918
8/1/2016 – 7/31/2017	330,499,781	102,134,699
8/1/2017 – 7/31/2018	284,023,249	59,920,741
8/1/2018 – 7/31/2019	237,546,717	33,473,728
8/1/2019 – 7/31/2020	191,070,185	
8/1/2020 – 7/31/2021	144,593,653	
8/1/2021 – 7/31/2022	98,117,121	
8/1/2022 – 7/31/2023	51,640,589	

**CHART 8: CIM ANNUAL GOALS & PERFORMANCE**

### **3. Unaccounted For Energy (Section 16-108.5(f)(7)).**

**Definition.** Unaccounted for energy (“UFE”) is unmetered electricity that is not billed to an individual retail customer, such as theft of service. As a result, the costs for such unmetered electricity are recovered from all ComEd customers, rather than from an individual retail customer that is responsible for such usage.

**Performance Goal.** ComEd must reduce UFE by 50%, ratably over the 10-year period.

**Baseline Calculation.** The baseline is the UFE for the year 2009. The baseline value is 881,969,000 kWh.

**Annual Performance Goals.** The annual UFE goals are set forth in Table 9 and are designed to reduce UFE by 50% ratably over the 10-year period beginning August 1, 2013. Chart 9 presents a graphical depiction of the annual UFE goals over the 10-year period.

**AMI Performance Year 6 Actual Performance.** The intent of Section 16-108.5(f)(7) is to measure the UFE reductions resulting from ComEd’s Accelerated AMI Plan. This Annual Report presents ComEd’s AMI Performance Year 6 UFE performance using two methodologies.

The first methodology, represented as “UFE Aug 1<sup>st</sup> – July 31<sup>st</sup>,” calculates UFE using a 12-month period from August 1, 2018 to July 31, 2019. As shown in the table below, ComEd’s performance under UFE Aug 1<sup>st</sup> – July 31<sup>st</sup> results in a UFE calculation of (414,037,956) kWh. ComEd’s analysis revealed that the UFE was primarily the result of a timing difference between the electricity delivered to the ComEd zone reported on calendar basis and retail electricity billings reported per the billing cycle. This allows differences in electricity usage measured at the start and end of each reporting period to have an impact on the resulting calculation. In addition, the

UFE Aug 1<sup>st</sup> – July 31<sup>st</sup> measurement starts and ends during the peak summer months when electricity usage may fluctuate more drastically, due to increased or decreased use of cooling systems. Therefore, instead of primarily measuring the amount of unmetered electricity that is not billed to individual customers, the UFE Aug 1<sup>st</sup> – July 31<sup>st</sup> result also reflected the differences in electricity usage due to summer weather from one year to the next.

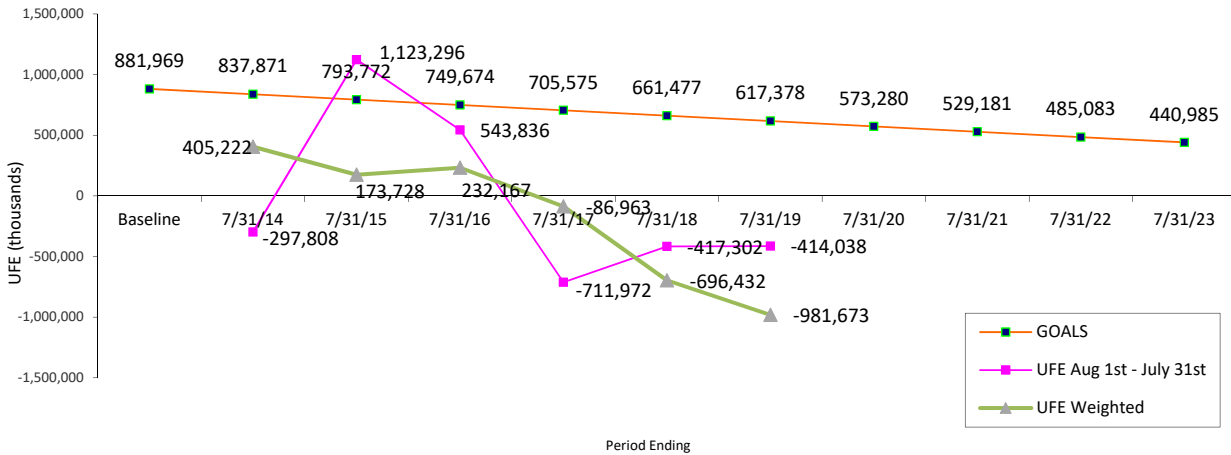
In light of this analysis, ComEd developed an alternative methodology, presented as “UFE Weighted.” By using 5/12 of the year end UFE value for 2018 (representing August to December) and 7/12 of the year end UFE value for 2019 (representing January to July), ComEd’s alternative methodology better reflects ComEd’s progress by minimizing summer weather impacts on UFE. The UFE Weighted approach also better aligns with the 2009 baseline which was calculated using a 12-month calendar year end UFE. ComEd’s UFE Weighted results in a UFE of (981,673,051) kWh.

For AMI Performance Year 6, ComEd’s annual performance goal for UFE was 617,378,300 kWh. As reflected in Table 9 and Chart 9, under the UFE Aug 1<sup>st</sup> – July 31<sup>st</sup> methodology ComEd achieved its AMI Performance Year 6 goal.



**TABLE 9: UFE ANNUAL GOALS & PERFORMANCE**

YEAR	UFE ANNUAL GOAL (Kwh)	UFE ANNUAL PERFORMANCE "UFE Aug 1 <sup>st</sup> - July 31 <sup>st</sup> " (kWh)	UFE ANNUAL PERFORMANCE "UFE WEIGHTED" (kWh)
Baseline (2009)	881,969,000		
8/1/2013 – 7/31/2014	837,870,550	-297,808,291	405,221,951
8/1/2014 – 7/31/2015	793,772,100	1,123,295,717	173,727,762
8/1/2015 – 7/31/2016	749,673,650	543,835,772	232,167,231
8/1/2016 – 7/31/2017	705,575,200	-711,972,219	-86,962,719
8/1/2017 – 7/31/2018	661,476,750	-417,301,830	-696,431,525
8/1/2018 – 7/31/2019	617,378,300	-414,037,956	-981,673,051
8/1/2019 – 7/31/2020	573,279,850		
8/1/2020 – 7/31/2021	529,181,400		
8/1/2021 – 7/31/2022	485,082,950		
8/1/2022 – 7/31/2023	440,984,500		

**CHART 9: UFE ANNUAL GOALS & PERFORMANCE**

#### **4. Uncollectible Expense (Section 16-108.5(f)(8)).**

**Definition.** Uncollectible expense is the amount of expense recorded in the Federal Energy Regulatory Form 1 (“FERC Form 1”) Account 904.

**Performance Goal.** ComEd must reduce uncollectible expense by \$30,000,000, ratably over the 10-year period.

**Baseline Calculation.** The baseline is the average uncollectible expense set forth in Account 904 in ComEd’s 2008 through 2010 FERC Form 1 submittals. The baseline value is \$67,637,205.

**Annual Performance Goals.** The annual uncollectible expense goals are set forth in Table 10 and are designed to reduce uncollectible expense by \$30,000,000, ratably over the 10-year period beginning August 1, 2013. Chart 10 presents a graphical depiction of the annual uncollectible expense goals over the 10-year period.

**AMI Performance Year 6 Actual Performance.** Section 16-108.5(f)(8) is intended to reflect the customer benefits that are associated with reducing the costs that are passed on to customers for bad debt expenses. This Annual Report presents ComEd’s AMI Performance Year 6 uncollectible expense performance using two methodologies.

The first methodology, represented as “Uncollectibles,” calculates the metric using expenses recorded in ComEd’s FERC Account 904 (Uncollectible Expense), a traditional measure of such costs. As shown in the table below, ComEd’s performance under Uncollectibles results in an uncollectible expense of \$36,370,998. Post-EIMA events, however, have impacted ComEd’s bad debt expense recorded in ComEd’s FERC Form 1 Account 904. Primarily, increases in the number of customers switching from ComEd supply to alternative retail electric suppliers – driven

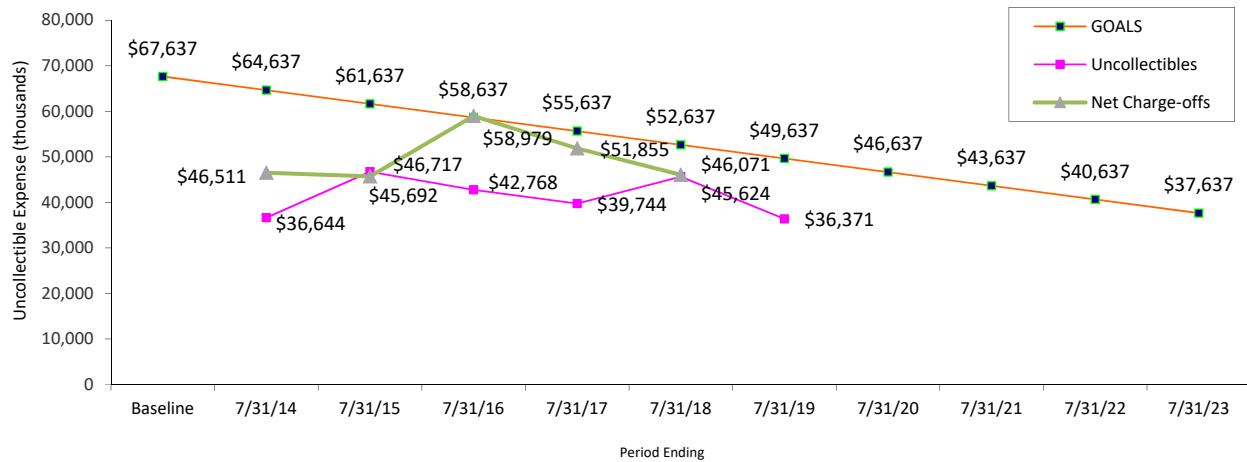
by municipal aggregation (opt-out) programs and ComEd's Rider PORCB Purchase of Receivables and Consolidated Billing ("PORCB") program – dramatically decreased ComEd's revenues. This concurrently reduced the amount of bad debt expense recorded in ComEd's FERC Account 904 (Uncollectible Expense).

In light of this, ComEd developed an alternative methodology, presented as "Net Charge-offs." ComEd's Net Charge-offs performance is calculated using a cash basis and utilizes amounts written off for both ComEd supplied customers and customers supplied by alternative retail electric suppliers under Rider PORCB. The Net Charge-offs approach better reflects ComEd's progress by minimizing the accounting impact of switching and municipal opt-out programs. ComEd's Net Charge-offs results in an uncollectible expense of \$49,753,261.

For AMI Performance Year 6, ComEd's annual performance goal for uncollectible expense was \$49,637,205. As reflected in Table 10 and Chart 10, under the Uncollectibles methodology ComEd achieved the AMI Performance Year 6 goal.

**TABLE 10: UNCOLLECTIBLE EXPENSE ANNUAL GOALS & PERFORMANCE**

YEAR	UNCOLLECTIBLE EXPENSE ANNUAL GOAL	UNCOLLECTIBLES ANNUAL PERFORMANCE	NET CHARGE-OFFS ANNUAL PERFORMANCE
Baseline (2008-2010)	\$67,637,205		
8/1/2013 – 7/31/2014	\$64,637,205	\$36,643,927	\$46,511,162
8/1/2014 – 7/31/2015	\$61,637,205	\$46,716,946	\$45,692,405
8/1/2015 – 7/31/2016	\$58,637,205	\$42,768,240	\$58,979,270
8/1/2016 – 7/31/2017	\$55,637,205	\$39,744,280	\$51,854,650
8/1/2017 – 7/31/2018	\$52,637,205	\$45,624,454	\$46,071,332
8/1/2018 – 7/31/2019	\$49,637,205	\$36,370,998	\$49,753,261
8/1/2019 – 7/31/2020	\$46,637,205		
8/1/2020 – 7/31/2021	\$43,637,205		
8/1/2021 – 7/31/2022	\$40,637,205		
8/1/2022 – 7/31/2023	\$37,637,205		

**CHART 10: UNCOLLECTIBLE EXPENSE ANNUAL GOALS & PERFORMANCE**

**5. Aggregate Average Percent CIM, UFE, Uncollectible Expense  
(Section 16-108.5(f-5)(6))**

Pursuant to the requirements of Section 16-108.5(f-5) of the Act, ComEd's Plan describes the tariff mechanism designed to apply certain statutory financial penalties which take the form of a basis point reduction to the cost of common equity for the relevant 12-month period. For CIM, UFE and Uncollectible Expense, the financial penalty under Section 16-108.5(f-5)(6) is applicable only if ComEd does not achieve an aggregated average percentage value of at least 95% in a given year. The aggregate average percentage is the average of the percentage goal achieved for CIM, UFE and Uncollectible Expense. Table 11 reflects ComEd's achievement toward the goals for CIM, UFE Aug 1<sup>st</sup> – July 31<sup>st</sup> and Uncollectibles in terms of percentage goal achieved. For AMI Performance Year 6, ComEd achieved an aggregate average percent of 193%. As described above, ComEd has presented alternative methodologies for both UFE and Uncollectible Expense. Table 12 reflects ComEd's achievement toward the goals for CIM, UFE Weighted and Net Charge-offs. Under the alternative methodologies, ComEd achieved an aggregate average percent of 215%.

**Table 11: Percent Goal Achieved CIM, UFE, Uncollectible Expense**

YEAR	CIM	UFE	UNCOLLECTIBLES	AGGREGATE AVERAGE PERCENT
8/1/2013 – 7/31/2014	116%	236%	143%	165%
8/1/2014 – 7/31/2015	117%	58%	124%	100%
8/1/2015 – 7/31/2016	149%	127%	127%	134%
8/1/2016 – 7/31/2017	169%	301%	129%	200%
8/1/2017 – 7/31/2018	179%	263%	113%	185%
8/1/2018 – 7/31/2019	186%	267%	127%	193%
8/1/2019 – 7/31/2020				
8/1/2020 – 7/31/2021				
8/1/2021 – 7/31/2022				
8/1/2022 – 7/31/2023				

**Table 12: Percent Goal Achieved CIM, UFE, Uncollectible Expense  
(ComEd Alternatives)**

YEAR	CIM	UFE WEIGHTED	NET CHARGE- OFFS	AGGREGATE AVERAGE PERCENT
8/1/2013 – 7/31/2014	116%	152%	128%	132%
8/1/2014 – 7/31/2015	117%	178%	126%	140%
8/1/2015 – 7/31/2016	149%	169%	99%	139%
8/1/2016 – 7/31/2017	169%	212%	107%	163%
8/1/2017 – 7/31/2018	179%	305%	112%	199%
8/1/2018 – 7/31/2019	186%	359%	99%	215%
8/1/2019 – 7/31/2020				
8/1/2020 – 7/31/2021				
8/1/2021 – 7/31/2022				
8/1/2022 – 7/31/2023				

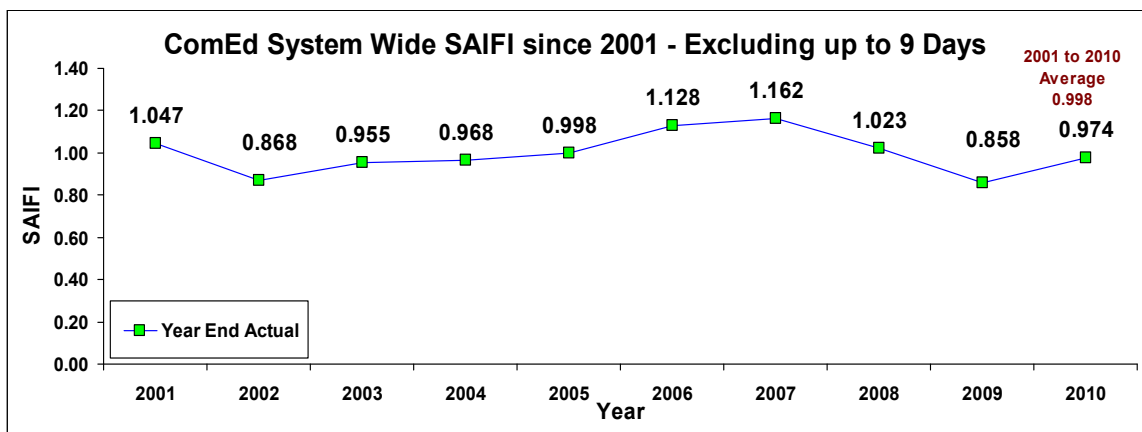
## APPENDIX 1

### CALCULATION OF METRIC BASELINES

The baseline calculations for the performance metrics included in this Annual Report are provided in this Appendix 1.

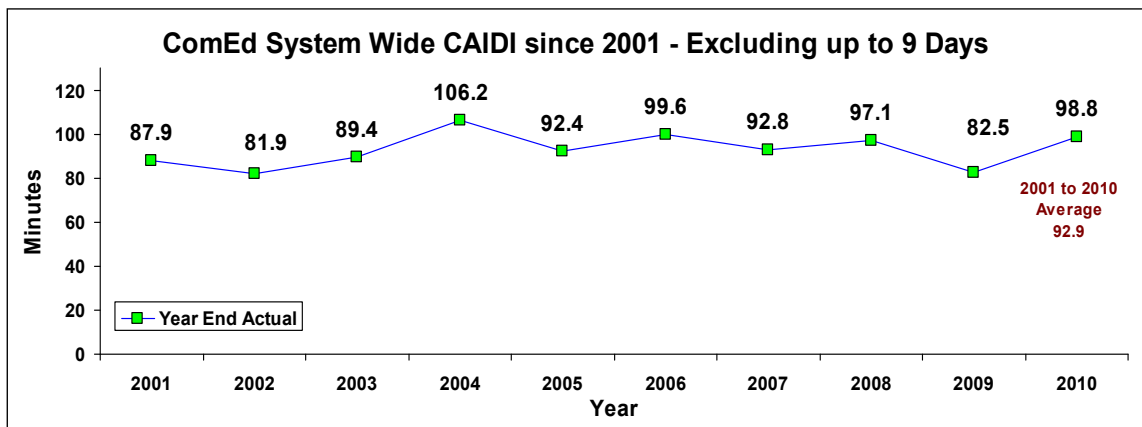
#### *System SAIFI*

The baseline is the 2001 through 2010 average System SAIFI excluding up to 9 Extreme Weather Event Days per year. The baseline value is 0.998.



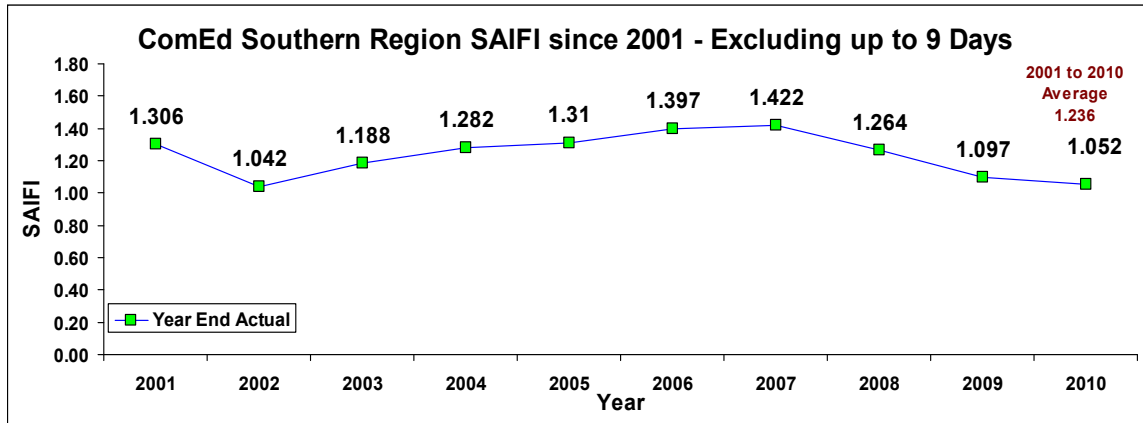
#### *System CAIDI*

The baseline is the 2001 through 2010 average System CAIDI excluding up to 9 Extreme Weather Event Days per year. The baseline value is 92.9 minutes.



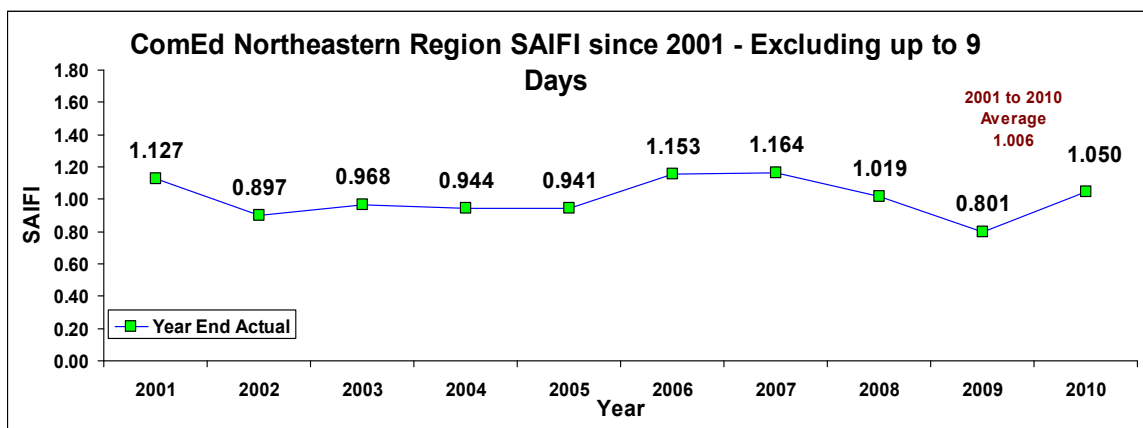
### ***Southern Region SAIFI***

The baseline is the 2001 through 2010 average Southern Region SAIFI excluding up to 9 Extreme Weather Event Days per year. The baseline value is 1.236.



### ***Northeastern Region SAIFI***

The baseline is the 2001 through 2010 average Northeastern Region SAIFI excluding up to 9 Extreme Weather Event Days per year. The baseline value is 1.006.



### ***Service Reliability Targets***

The baseline is the 2010 data reported to the Commission regarding performance under each of the service reliability targets. The baseline value is 407 customers.

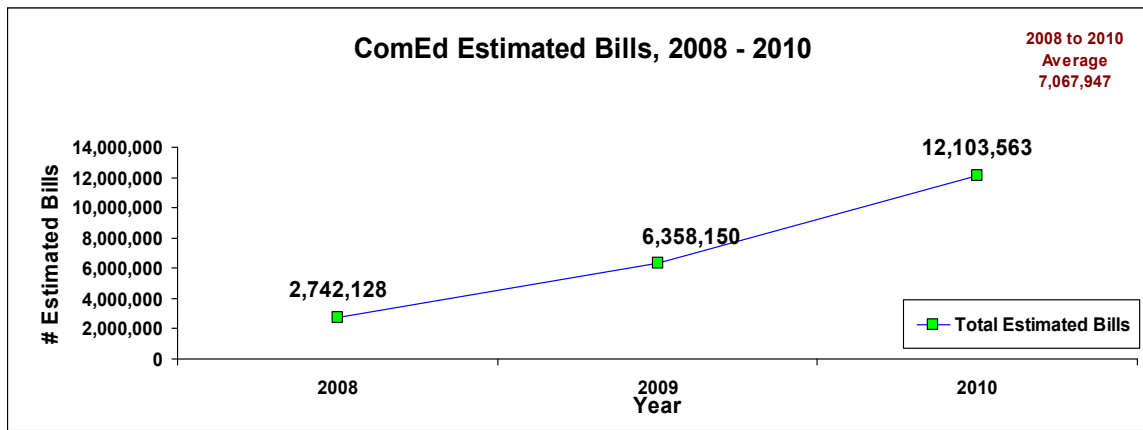


### ***Opportunities for Minority-Owned and Women-Owned Business Enterprises***

The baseline is ComEd's capital expenditures that were paid to MWBE in 2010. The baseline value is \$65,000,000.

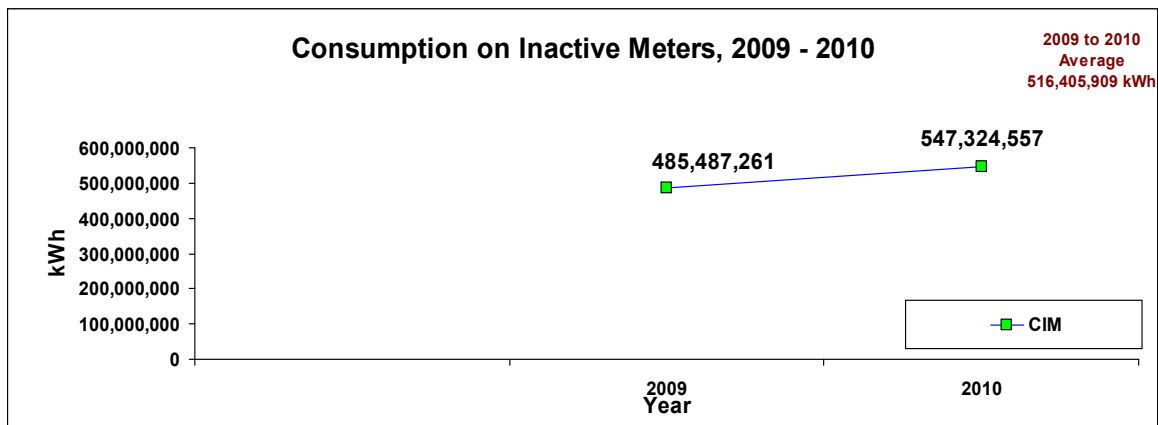
### ***Estimated Electric Bills***

The baseline is the 2008 through 2010 average number of estimated electric bills per year. The baseline value is 7,067,947.



### ***Consumption on Inactive Meters (CIM)***

The baseline is the average CIM for the years 2009 and 2010. The baseline value is 516,405,909 kWh.

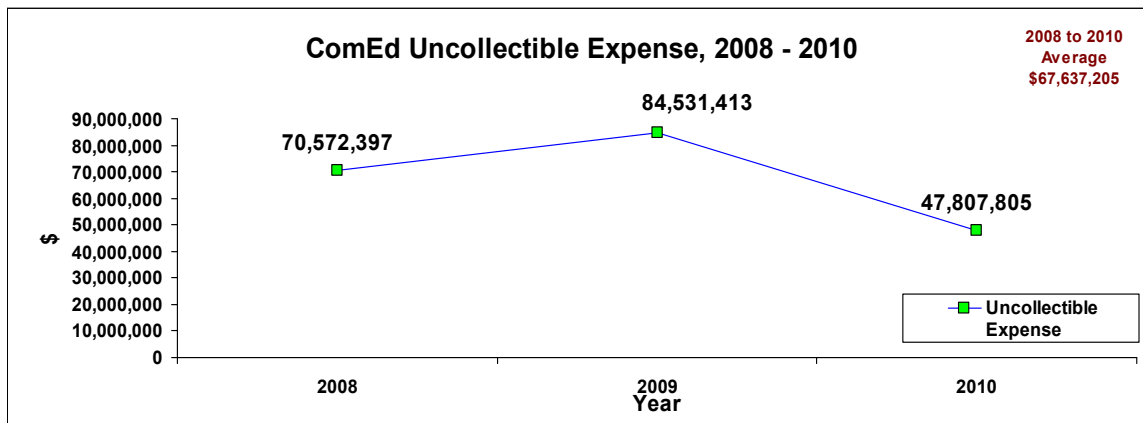


### ***Unaccounted For Energy (UFE)***

The baseline is the UFE for the year 2009. The baseline value is 881,969,000 kWh.

### ***Uncollectible Expense***

The baseline is the average uncollectible expense set forth in Account 904 in ComEd's 2008 through 2010 FERC Form 1 submittals. The baseline value is \$67,637,205.



## **APPENDIX 2**

### **IDENTIFICATION OF EXTREME WEATHER EVENT DAYS**

ComEd may exclude up to nine Extreme Weather Event Days from the calculations related to the System SAIFI, System CAIDI, Southern Region SAIFI and Northeastern Region SAIFI. An Extreme Weather Event Day is defined as a 24-hour calendar day (beginning at 12:00 a.m. and ending at 11:59 p.m.) during which any weather event (*e.g.*, storm, tornado) caused interruptions of electric delivery service for 10,000 or more of the participating utility's customers for 3 hours or more.

Both the baseline calculation(s) and annual calculations must use the same exact methodology and exclude up to nine Extreme Weather Event Days to ensure an equivalent baseline and annual measurement.

If there are more than nine days that meet the definition of an Extreme Weather Event Day in a year, then the utility may choose no more than nine Extreme Weather Event Days.

The same exact Extreme Weather Event Days must be excluded from the calculation of the System SAIFI, System CAIDI, Southern Region SAIFI and Northeastern Region SAIFI. However the calculations for Southern Region SAIFI and Northeastern Region SAIFI exclude only those customer interruptions occurring in each of these respective regions.

**2001 to 2010 Extreme Weather Event Day Summary**

Year	Extreme Weather Days Qualifying for Exclusion	Number of Extreme Weather Days Excluded	Customer Interruptions Excluded	Customer Interruptions Not Excluded (Exceeds 9 days)
2001	14	9	856,000	295,000
2002	8	8	692,000	-
2003	15	9	1,266,000	236,000
2004	13	9	898,000	146,000
2005	9	9	633,000	-
2006	14	9	1,120,000	217,000
2007	23	9	1,388,000	617,000
2008	17	9	1,166,000	360,000
2009	8	8	586,000	-
2010	16	9	1,428,000	327,000

2001 through 2004 days qualifying for exclusion

- Days excluded from the determination of baseline are highlighted in yellow

**2001**

Date	Customer Interruptions
10/25/2001	131,139
4/7/2001	115,487
8/9/2001	100,347
8/2/2001	94,713
6/12/2001	93,431
7/23/2001	85,574
7/22/2001	81,461
6/14/2001	80,497
2/25/2001	73,819
8/22/2001	72,601
10/24/2001	66,703
7/21/2001	60,212
7/25/2001	51,322
10/13/2001	44,488

**2002**

Date	Customer Interruptions
3/9/2002	204,515
8/19/2002	104,505
10/4/2002	89,607
6/10/2002	82,981
8/22/2002	65,597
6/25/2002	53,739
7/9/2002	45,909
8/21/2002	45,430

**2003**

Date	Customer Interruptions
5/11/2003	264,399
7/5/2003	221,019
11/12/2003	193,669
7/17/2003	152,349
7/15/2003	109,510
7/7/2003	103,410
8/1/2003	86,346
7/6/2003	74,456
7/27/2003	60,731
7/21/2003	56,096
7/20/2003	55,190
5/1/2003	38,685
7/8/2003	38,365
5/12/2003	26,418
7/18/2003	21,432

**2004**

Date	Customer Interruptions
7/21/2004	129,162
7/22/2004	118,175
5/21/2004	112,577
3/5/2004	105,023
5/30/2004	93,885
11/24/2004	92,062
6/12/2004	86,143
8/27/2004	85,341
10/30/2004	75,679
8/28/2004	73,355
4/20/2004	26,651
8/4/2004	25,679
11/25/2004	20,512

2005 through 2007 days qualifying for exclusion

- Days excluded from the determination of baseline are highlighted in yellow

2005		2006		2007	
Date	Customer Interruptions	Date	Customer Interruptions	Date	Customer Interruptions
7/25/2005	103,317	10/2/2006	350,189	8/23/2007	467,785
7/20/2005	100,467	7/20/2006	132,676	12/23/2007	203,441
11/13/2005	99,306	5/29/2006	131,105	7/18/2007	126,569
6/4/2005	98,522	8/2/2006	119,258	8/22/2007	120,320
9/13/2005	66,701	8/24/2006	97,933	8/24/2007	101,489
8/20/2005	55,642	3/13/2006	82,824	12/1/2007	100,252
10/2/2005	50,688	10/3/2006	69,615	6/7/2007	100,134
7/26/2005	33,522	8/3/2006	68,463	4/11/2007	88,678
7/21/2005	25,188	12/1/2006	68,175	5/24/2007	79,751
		5/30/2006	60,027	2/24/2007	76,718
		10/4/2006	50,861	6/18/2007	69,461
		7/18/2006	50,498	8/7/2007	67,252
		9/22/2006	42,882	7/9/2007	62,164
		10/5/2006	12,523	8/12/2007	59,311
				9/25/2007	49,775
				7/26/2007	47,394
				7/19/2007	35,937
				2/25/2007	35,826
				8/25/2007	26,586
				12/2/2007	24,093
				6/8/2007	23,443
				8/26/2007	20,120
				8/27/2007	19,191

2008 through 2010 days qualifying for exclusion

- Days excluded from the determination of baseline are highlighted in yellow

2008		2009		2010	
Date	Customer Interruptions	Date	Customer Interruptions	Date	Customer Interruptions
8/4/2008	376,721	6/19/2009	227,001	6/18/2010	456,892
6/15/2008	138,443	12/24/2009	97,320	6/23/2010	263,965
8/5/2008	115,163	3/29/2009	85,634	10/26/2010	183,766
5/30/2008	111,395	6/24/2009	55,187	10/27/2010	131,017
6/8/2008	107,489	10/6/2009	52,490	7/23/2010	99,194
6/6/2008	102,830	6/20/2009	37,401	7/24/2010	93,373
6/13/2008	87,792	5/14/2009	18,256	5/31/2010	72,993
12/19/2008	63,396	12/25/2009	12,807	6/26/2010	66,002
12/21/2008	62,791			8/4/2010	60,590
7/10/2008	60,980			6/21/2010	57,838
5/2/2008	60,821			6/24/2010	57,047
6/28/2008	60,086			9/21/2010	55,136
10/26/2008	59,641			4/6/2010	46,849
6/7/2008	48,927			6/19/2010	43,976
6/9/2008	31,982			6/22/2010	41,495
8/6/2008	25,869			6/20/2010	24,669
8/7/2008	11,331				

## Days qualifying for exclusion

- Days excluded from the calculations are highlighted in yellow.

**2013 - Performance Year 1**

Date	Customer Interruptions
06/24/2013	226,685
11/17/2013	192,020
8/30/2013	137,096
04/18/2013	74,888
06/12/2013	71,434
06/27/2013	53,490
06/26/2013	47,132
05/28/2013	46,657
06/25/2013	46,052
08/31/2013	33,635
07/20/2013	32,947
11/18/2013	14,250

**2014 - Performance Year 2**

Date	Customer Interruptions
06/30/2014	326,544
09/05/2014	141,572
03/12/2014	109,868
08/25/2014	78,571
07/01/2014	57,669
06/21/2014	46,647
08/23/2014	41,760
05/11/2014	32,302
07/02/2014	24,019
07/03/2014	31,814
09/06/2014	16,350

**2015 - Performance Year 3**

Date	Customer Interruptions
08/02/2015	100,550
12/28/2015	76,856
07/13/2015	72,654
08/18/2015	59,551
11/21/2015	58,331
06/22/2015	57,442
11/12/2015	56,516
04/10/2015	52,342
02/01/2015	51,214
08/03/2015	19,399
06/23/2015	9,754
12/29/2015	6,739

**2016 – Performance Year 4**

Date	Customer Interruptions
2/19/2016	213,785
7/24/2016	82,687
3/16/2016	63,822
7/6/2016	63,333
7/21/2016	60,301
7/23/2016	54,135
2/20/2016	23,194
7/25/2016	20,461
7/22/2016	12,525

**2017 – Performance Year 4**

Date	Customer Interruptions
3/8/2017	113,232
1/10/2017	89,501
7/21/2017	69,387
7/12/2017	67,301
5/17/2017	61,626
6/14/2017	59,814
7/23/2017	57,846
6/28/2017	49,287
7/19/2017	49,168
5/18/2017	40,065
7/20/2017	36,794
3/7/2017	33,514
7/22/2017	17,016
6/29/2017	12,939

**2018 – Performance Year 6**

Date	Customer Interruptions
11/26/2018	166,518
11/25/2018	111,485
10/20/2018	83,702
9/25/2018	60,383
8/29/2018	33,069
9/26/2018	21,561
11/28/2018	7,433
11/27/2018	6,307

**2019 – Performance Year 7**

Date	Customer Interruption
6/30/2019	133,342
2/12/2019	96,021
2/24/2019	83,225
11/27/2019	81,859
8/18/2019	53,174
10/30/2019	50,699
7/2/2019	42,418
7/1/2019	24,129